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Amendments to the Specification

Page 9, lines 29-33

Figure 1 shows a vehicle platform frame ~~(40)~~ 10 for receiving modules of a modular vehicle according to the invention. The frame is of a standard width that matches the width of a mounting bracket on the base of each module. Holes 11 of a ~~standardization~~ standard size are drilled at regular intervals along the length of the frame for receiving mounting pins that secure each module mounted on the frame.

10 Page 10, lines 1-33

Figure 2 shows a frame ~~(22)~~ 22 of a first module according to the invention. The forward-rearward length 23 ~~(L)~~ of the frame is a standardized fraction of the vehicle platform frame. The width of the mounting bracket ~~(20)~~ 20 on the base of the module frame matches that of the vehicle platform frame. Holes 24 drilled in the module frame match the holes placed at regular intervals on the vehicle platform frame. Similarly, Figures 3 and 4 show a frame ~~(30,~~ 30, ~~40)~~ of a second 30 and third 40 module respectively, according to the invention.

Figure 5 shows the frame of the third module ~~(40)~~ 40 engaged with the vehicle platform frame 10 ~~(40)~~. The standardized width and hole spacing of the vehicle platform frame and module mounting bracket ensure that the module can be placed at a variety of locations on the vehicle platform frame. Figure 6 shows the first 22, second 30, and third 40 modules ~~(22, 30, 40)~~ engaged with the vehicle at the vehicle platform frame 10 ~~(40)~~.

Figure 7 shows a power distribution scheme for a modular vehicle according to the invention. The power system onboard each module (indicated by the dashed box 70 ~~(70)~~) provides power to one or more safety functions 71 ~~(74)~~ and is connected thereto by a relay 72 ~~(72)~~, breaker 73 ~~(73)~~, and contactor 74 ~~(74)~~ to a fused transfer 75 ~~(75)~~. The relay is controlled directly from within the cabin of a modular vehicle. Power is also provided directly from the breaker to the non-safety functions 76 ~~(76)~~ of the module. The power within each module may also contain a DC - DC conversion 77 ~~(77)~~ to alter the voltage supplied to the module.

The fused transfers are also connected via a contactor to the vehicle batteries 78 ~~(78)~~, and to the electrical systems of the non-module vehicle devices 80 ~~(80)~~. A connection is also provided, via another contactor, to a one or more "technical batteries" ~~(80)~~ ~~(79)~~ 79 contained in the power module. These batteries may be charged directly from an auxiliary alternator ~~(84)~~ 81.

Finally, the fused transfers are connected to an inverter 82 ~~(82)~~ that can provide power to the vehicle when connected to a 120V shore power line. This allows for powering of all vehicle and

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module devices directly from the shoreline, and for charging of the vehicle and power module batteries.

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5 Figure 8 shows a diagram illustrating a control scheme for a modular vehicle according to the invention. In the diagram shown, lines 83 ~~(80)~~ carry communications ~~with safety functions,~~ lines ~~(82)~~ carry data, lines ~~(84)~~ carry communications between peripherals and computers, lines ~~(88)~~ 84 carry data, lines 85 carry communications with safety functions, lines 86 carry indicate video signals, and lines ~~(89)~~ indicate 87 carry audio signals.

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The safety functions are controlled directly from a control panel 105 containing a number of toggle switches. For each module, a switch is assigned to the main module power. A number of other switches are assigned to each safety critical function on the module. Each toggle switch is connected with the corresponding module function with a dedicated wire.

15 Additionally, the control panel may be connected to the vehicle computer to monitor the vehicle state.

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Data are carried via an Ethernet carried on Category 5 twisted pair wiring. The console computer 88 ~~(81)~~ with which an operator interfaces, the airport wireless (802.11) networks 89, the vehicle computer 90 ~~(83)~~, the satellite tracking Internet terminal 91 ~~(85)~~, the rabbit controller ~~(87)~~ analog/digital input/output microprocessor 92, surveillance receiver controls 93 ~~(89)~~, and the panoramic video processing unit 94 ~~(91)~~ are all connected to the Ethernet via an Ethernet switch 95.

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The peripherals also operate over Category 5 twisted pair wiring. All peripherals are integrated with a Category 5 KVM switch 96.

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Video signals obtained from devices throughout the main vehicle and modules are routed along Category 5 wiring to an appropriate destination using a matrix switch. Greater detail is provided in Figure 9.

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Finally, the audio obtained from the surveillance receivers, as well as other sources such as satellite radio, is handled by an audio mixer 97 ~~(93)~~. The audio is also routed over Category 5 wiring. The behavior of the audio mixer is addressable using serial controls from the video streaming device and video recorder 98 ~~(95)~~.

Figure 9 shows a scheme for routing video signals in a modular vehicle according to the invention. Video from leftward (L), rightward (R), downward (D), and backward (B)

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viewing cameras; a mast mounted camera (M), and a forward looking infrared camera (FLIR); a digital satellite system (DSS), and a weapons system cameras (W) are all provided to a 12x4 matrix switch 99. The switch provides signals to a video-streaming

5 **Page 12, lines 1-6**

server 100 may handle more than one signal simultaneously, and also incorporates audio from the audio mixer, as in Figure 8. Video signals are also provided to a video recording device 101 and a console based monitor 102. Finally, signals may be routed to a display 103 integrated into a rear view mirror of the vehicle.

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